

UNCLASSIFIED

AD NUMBER	
AD392733	
CLASSIFICATION CHANGES	
TO:	unclassified
FROM:	confidential
LIMITATION CHANGES	
TO:	Approved for public release, distribution unlimited
FROM:	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 22 JUL 1968. Other requests shall be referred to the Adjutant General's Office [Army], Washington, DC.
AUTHORITY	
31 Jul 1980, Group-4, per document marking, DoDD 5200.10; OAG D/A ltr dtd 29 Apr 1980	

THIS PAGE IS UNCLASSIFIED

# **SECURITY**

---

# **MARKING**

**The classified or limited status of this report applies to each page, unless otherwise marked.**

**Separate page printouts MUST be marked accordingly.**

---

**THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793 AND 794. THE TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.**

**NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.**



**CONFIDENTIAL**

**DEPARTMENT OF THE ARMY  
OFFICE OF THE ADJUTANT GENERAL  
WASHINGTON, D.C. 20310**

IN REPLY REFER TO

AGAM-P (M) (23 Aug 68) FOR OT RD 682122

6 September 1968

**SUBJECT: Operational Report - Lessons Learned, Headquarters, I Corps  
(Group) Artillery, Period Ending 30 April 1968 (U)**

**SEE DISTRIBUTION**

"This document contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U. S. C., Section 793 and 794. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law."

1. Subject report is forwarded for review and evaluation in accordance with paragraph 5b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT RD, Operational Reports Branch, within 90 days of receipt of covering letter.

2. Information contained in this report is provided to insure that the Army realizes current benefits from lessons learned during recent operations.

3. To insure that the information provided through the Lessons Learned Program is readily available on a continuous basis, a cumulative Lessons Learned Index containing alphabetical listings of items appearing in the reports is compiled and distributed periodically. Recipients of the attached report are encouraged to recommend items from it for inclusion in the Index by completing and returning the self-addressed form provided at the end of this report.

BY ORDER OF THE SECRETARY OF THE ARMY:

1 Incl  
as

**DISTRIBUTION:**

Commanding Generals

US Continental Army Command

US Army Combat Developments Command

Commandants

US Army Command and General Staff College

US Army Armor School

US Army Artillery and Missile School

US Army Infantry School

US Army Missile and Munitions School

*Kenneth G. Wickham*

KENNETH G. WICKHAM  
Major General, USA  
The Adjutant General



**Regraded unclassified when separated  
from classified inclosure.**

**CONFIDENTIAL**

Copies furnished:

Office, Chief of Staff, US Army

Deputy Chiefs of Staff

Chief of Engineers

Chief of Research and Development

Assistant Chiefs of Staff

Research Analysis Corporation

OSD(SA), Assistant for Southeast Asia Forces

Defense Documentation Center

Security Officer, Hudson Institute

Joint Action Control Office

Commanding Generals

US Army Materiel Command

US Army Southern Command

I Corps (Group) Artillery

Commanding Officers

US Army Limited War Laboratory

US Army Logistics, Doctrine Systems & Readiness Agency

2d Battalion, 138th Artillery

3

**CONFIDENTIAL**



DEPARTMENT OF THE ARMY  
HEADQUARTERS I CORPS (GROUP) ARTILLERY  
APO SAN FRANCISCO 96202

EACIAT-C

1 July 1968

SUBJECT: Operational Report of I Corps (Group) Artillery for the Period  
Ending 30 April 1968 (HCS CSFOR-65) (U)

Commanding General  
I Corps (Group)  
ATTN: EACICT-O&T  
APO 96358

(U) The following report is submitted in accordance with USARPAC regulation 525-15, 22 March 1968.

Section 1

Significant Organizational Activities

1. (U) The organizational structure of I Corps (Group) Artillery is indicated in Inclosure 1. Headquarters and Headquarters battery is organized under TOE 6-501 E and USARPAC General Order Number 249, 13 November 1967. The TOE and General Orders for attached units are indicated in Inclosure 1.
2. (U) The following change in command occurred during the reporting period: LTC J. B. Churchill assumed command of the 1st Battalion, 17th Artillery from LTC R. W. Melcher.
3. (U) On 2 April 1968 the Headquarters battery received a Command Maintenance Management inspection. The overall rating received was satisfactory.
4. (U) In January 1968 Headquarters, I Corps (Group) Artillery and its attached organizations participated in FTX CAPITOL HILL. This FTX was used to exercise the updated draft of I Corps OPLANs and I Corps Operating Instructions. This exercise found the Fire Support Coordination Annex to the OI to be adequate with only minor changes which were made. The exercise was also helpful in indicating the need for a revised Operating Instruction list of reports received during FTX, CPX and readiness condition

FOROTAD  
682122

**CONFIDENTIAL**

DOWNGRADED AT 3 YEAR INTERVALS;  
DECLASSIFIED AFTER 12 YEARS.  
DOD DIR 5200.10

**CONFIDENTIAL**

4

EACIAT-C

1 July 1968

SUBJECT: Operational Report of Headquarters I Corps (Group) Artillery  
for the Period Ending 30 April 1968 (RCS CSFOR-65) (U)

exercises. The required Annex to the I Corps (Group) Operating Instructions was published in March 1968.

5. (U) During the latter part of January through April, there was a major input of 1378 new personnel which brought the Command to full authorized strength. Few of these filler personnel were school trained and a number had Military Occupational Specialties completely unrelated to artillery skills and included 200 with infantry MOSs.
6. (U) Allocations of special ammunition in support of the I Corps (Group) OPLAN were revised and made more realistic. Contingency plans, to include targeting for and positioning of Honest John units, were developed in conjunction with I Corps (Group) and EUSA plans.
7. (U) All compound defense plans for units attached to I Corps (Group) Artillery were revised and updated to include formation of Quick Reaction Forces, prescribed occupation of emplacements, and assembly of compound reserves. Compound defenses were improved with the construction of fortified emplacements. MSA security was improved with the strengthening of physical barriers and installation of additional lighting.
8. (U) Survey was completed for additional firing positions for both tube artillery and missile units.
9. (C) Two Night Vision Sights, AN/TVS-4 were issued to the 1st Target Acquisition Battalion, 25th Artillery for testing under operational conditions. A copy of the test report is enclosed (Incl 2).
10. (U) The I Corps (Group) Artillery Specialist Academy conducted an intensive program of instruction: Artillery fire direction, liaison, communications, survey, motor maintenance and map reading, graduating 704 U.S. and KATUSA personnel who returned to their respective units as more highly skilled artillery men.
11. (U) A program to improve the facilities and physical plant was effected, using both contract and self-help labor. Of primary importance was the complete renovating of the post exchange and the repair and rebuilding of fences, roads, retaining walls and drainage ditches.

-2-

**CONFIDENTIAL**

5

CONFIDENTIAL

EACIAT-C

SUBJECT: Operational Report of Headquarters I Corps (Group) Artillery  
for the Period Ending 30 April 1968 (RCS CSFOR-65) (U)

1 July 1968

Section II

Commanders' Observations & Recommendations

Part I

Observations (Lessons Learned)

12. (U) Personnel:

Item: Replacements

Discussion: The receipt of 1328 replacements during the period (71.5% of the authorized strength of the command) created many problems: billeting, field clothing, weapons and gas mask shortages were among the problems encountered. Over 200 of the replacements were not qualified in MOSs required by this command. However, sufficient personnel were received to provide for significant overages in several areas, i. e., cooks, wiremen, medics and surveyors.

13. (C) Operations:

Item: Overall Combat Readiness

Discussion: The combat readiness of the command was greatly improved with the input of personnel and the issue of new equipment such as the new series FM radios. Following this input, the command promptly conducted numerous successful FAST PACE tactical exercises and COUNTERPUNCH (compound defense) exercises which served to further strengthen its state of combat readiness.

14. (U) Training:

Item: Unit Proficiency Training

Discussion: The influx of 71.5% of the authorized strength of the command created a major problem in the area of Unit Proficiency training. Battery tests for the 6th Battalion, 12th Artillery was conducted during the week of 8 April. However, for the remaining of the command battery and battalion Operational Readiness Tests were postponed in order to provide time to conduct BUT and AUT in preparation for the test.

15. (U) Intelligence: None

3  
CONFIDENTIAL

EACIAT-C

1 July 1968

SUBJECT: Operational Report of Headquarters I Corps (Group) Artillery  
for the Period Ending 30 April 1968 (RCS CSFOR-65) (U)

16. (U) Logistics:

Item: Receipt of New Equipment

Discussion: During the rating period the command received the start of the replacement chassis for the M-107 and M-110. The complete changeover is to be completed next reporting period.

The new series FM radios were issued to all elements of the command. This issue greatly improved communications and operations capabilities. However, test equipment and spare parts were not issued, or made available for these sets.

The flow of repair parts, which had practically ceased in December 1967 and January 1968, began to improve slightly.

Part II

Recommendations

17. (U) Personnel: Qualified replacements should be furnished on a timely basis and units should be maintained at or near authorized strength.
18. (U) Operations: None
19. (U) Training: See paragraph 17 above. This recommendation would aid in the continuity of unit proficiency.
20. (U) Intelligence: None
21. (U) Logistics: Prior to or in conjunction with the issue of new equipment, the necessary test equipment and spare parts should be made available. Requisitions for repair parts must be continued during periods of austerity provide the necessary demand data in the supply system.

2 Incl  
as

*Charles W. Fletcher*  
CHARLES W. FLETCHER  
Brigadier General, USA  
Commanding



7  
EACICT-M (16 July 68) 1st Ind  
SUBJECT: Operational Report - Lessons Learned

LTC Clark/rdr/3062/3308

Headquarters I Corps (Gp) APO San Francisco 96358 22 JUL 1968

THRU: Commanding General, Eighth United States Army, ATTN EAGO-T, APO 96301  
Commanding General, USARPAC, ATTN: GPOP-DT, APO 96558

TO: ACSFOR, Department of the Army, Washington D. C. 20310

1. This headquarters has reviewed the Operational Report - Lessons Learned for the period 1 January thru 30 April 1968 for the I Corps (Group) Artillery.
2. All observations and recommendations will be considered and appropriate action taken.
3. A copy of this indorsement will be furnished to the reporting unit through channels.

FOR THE COMMANDER:

*D. K. Ledwith*  
D. K. LEDWITH  
2 LT, AGC  
ASST. AG

CONFIDENTIAL

EAGO-MH (1 Jul 65) 2d Ind  
SUBJECT: Operational Report of I Corps (Group) Artillery for the Period  
Ending 30 April 1968 (RCS CSFOR-65) (U)

8

Headquarters, Eighth United States Army, APO 96301 30 JUL 68

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT  
APC 96558

1(c) Reference item concerning replacements, page 3, para 12; concur with observation. The following actions have been taken to improve the status of replacement personnel:

a. During the period February through April 1968, a large number of bulk fill personnel assigned to Eighth Army by DA were equitably distributed to major subordinate commands. Commands were advised that a large number of these personnel were AIT graduates and were assigned in an overstrength status for training, reclassification and utilization as determined by the commanders.

b. Through a series of messages we have informed the Department of the Army of Eighth Army's urgent personnel requirements. The needs for middle-grade noncommissioned officers and qualitative fill of requisitions have been reiterated. DA has advised that they will make every effort to provide replacements by grade and MOS required.

2(c) Reference item concerning personnel recommendation, page 4, para 17. Concur in recommendation.

a. DA is continuously informed through Eighth Army requisitioning procedures of the need for timely replacement of personnel. When requisitions have not been filled within 60 days of request, an inquiry is made by AG to determine status and new requisitions are submitted if required. In addition, DA is making a comprehensive study of "no-show" personnel in an effort to improve the replacement system.

b. DA has advised in a series of messages that Eighth Army's operating strength will be maintained at 100% of authorized. Current trends indicate that DA will be able to meet this objective during the next quarter.

3(c) Reference item concerning replacement chassis for the M-107 and M-110, page 4, para 16. Concur in recommendation. Following is the status of M-107 and M-110 SP chassis exchange program, referred to as the "Closed Loop Exchange of M-107/M-110 SP Chassis".

**CONFIDENTIAL**

9

30 JUL 68

EAGO-MH

SUBJECT: Operational Report of I Corps (Group) Artillery for the Period  
Ending 30 April 1968 (RCS CSFOR-65) (U)

a. In January 1968, Eighth Army received eight rebuilt M-107/M-110 SP vehicles as the first increment of the Closed Loop Program for exchanging the chassis for the 8-inch howitzer and 175 mm gun. The program, designed to exchange existing chassis in-country with CONUS rebuilds, was scheduled to run through August 1968.

b. In June 1968, Eighth Army received the final increment of eight rebuilt vehicles. A total of 48 chassis have been exchanged with the last vehicles received approximately three months ahead of schedule.

c. Retrograde to CONUS of the old vehicles is also proceeding ahead of schedule. A total of 25 have been retrograded and the balance is in the process of being retrograded.

d. Upon completion of the program, a total of 49 each M-107/M-110 SP vehicles will be on hand in Eighth Army. This figure brings units up to their authorized allowances, provides a maintenance float and one vehicle for a war reserve.

4.(a) Reference item concerning new series FM radios; non-concur with the statement. The spare parts package in support of I Corps new series FM radios was received in the command during March 1968, prior to conversion completion. While the using units may not have received parts, the package was broken out into days of supply commensurate with levels of support and issued to the DS/GS units. Reports of spare parts shortages have not been received by this headquarters. Test sets for the AN/PRC-25 series radio sets were received concurrent with the end items. Test sets for the VRC-12 series radio sets were not furnished by ECOM as they are not DA controlled and can be obtained through normal requisitioning procedures. Neither test set is essential, since other on hand test equipment will perform the same function.

5.(c) Reference item concerning the flow of repair parts; concur. Requisitioning was curtailed due to a fund shortage but began to improve in January 1968, when funds became available.

FOR THE COMMANDER:

*R. N. Hunter*

R. N. HUNTER  
1LT, AGC  
ASST AG

7

**CONFIDENTIAL**

GPOP-DT (1 Jul 68) 3d Ind (U)

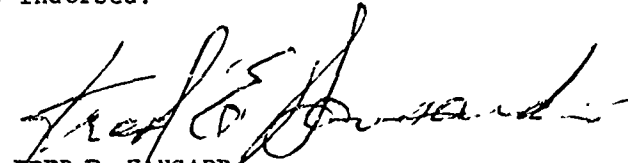
SUBJECT: Operational Report of HQ, I Corps (Gp) Arty for Period Ending  
30 April 1968, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 16 AUG 1968

TO: Assistant Chief of Staff for Force Development, Department of the  
Army, Washington, D. C. 20310

This headquarters has evaluated subject report and forwarding indorse-  
ments and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:



FRED E. HANSARD  
Colonel, AGC  
Adjutant General

11



**CONFIDENTIAL**

12

E. CIAT-C (7 Jun 68) 1st Ind  
SUBJECT: Night Vision Sight (U)

DA, HEADQUARTERS I CORPS (GROUP) ARTILLERY, APO 96202, 18 Jun 68

TO: Commanding General, I Corps (Group), ATTN: EACICI-A, APO 96358

1. (U) References:

a. Confidential letter, EACICI-A, Headquarters I Corps (Group), dated 9 February 1968, Subject: Letter of Instruction, Night Vision Sight (U).

b. Confidential message number 01646, Headquarters I Corps (Group), Subject: Night Vision Sight Employment (U), 24 May 68.

c. Confidential message number 01739, Headquarters I Corps (Group), Subject: Night Vision Sight Employment (U), 3 June 68.

d. Confidential letter, EACIAT-25-O, Headquarters 1st Target Acquisition Battalion, 25th Artillery, 7 May 1968, Subject: Initial Report on Night Observation Device (Revised).

2. (C) The basic communication contains test results on the two Night Vision Sights, submitted in compliance with reference 1a, and as a more detailed follow-up report to that in reference 1d.

3. (C) These test results indicate the devices can be employed most productively by the Flash Platoon of a FATAB. Other elements of a FATAB would find it less useful so far as target acquisition is concerned.

4. (C) It is considered that further testing of the two devices, is both necessary and desirable before a final report is rendered on the Night Vision Sights.

5. (C) Coordination is being effected at this time between I Corps (Group) Artillery and the 2d US Infantry Division to permit utilization and testing of

13

**CONFIDENTIAL**

EACIAT-C

18 June 1968

SUBJECT: Night Vision Sight (U)

the Night Vision Sights in an operational and tactical environment along a very active portion of the DMZ. Result of that testing will be forwarded to your headquarters in a future report.

FOR THE COMMANDER:

GARY D. WAGONER  
1LT, Artillery  
Adjutant

//  
**CONFIDENTIAL**

14

**CONFIDENTIAL**

DEPARTMENT OF THE ARMY  
HEADQUARTERS  
1ST TARGET ACQUISITION BATTALION, 25TH ARTILLERY  
APO SAN FRANCISCO 96358

EACIAT-25-0

7 June 1968

REFERENCE: Letter Test Plan This Headquarters 24 March 1968

SUBJECT: Night Vision Sight (U)

Commanding General  
II Corps (Sp) Artillery  
EACIAT-G  
APO San Francisco 96202

TEST RESULTS OF NIGHT OBSERVATION DEVICE

I. (C) OBSERVER TRAINING

The operators were given a three hour block of instruction covering the characteristics, components, accessories, functioning, assembly, disassembly, orientation and maintenance of the instrument. This instruction was sufficient for the operators with prior observation experience, however two of the operators had no such experience. An additional hour of instruction was given to these two operators. This additional hour of instruction consisted mainly of defining artillery terms, the laying of the M-2 Aiming Circle, and methods of using the aiming circle to orient the Night Observation Device. The operators were then given a practical exercise on observing men and vehicles at various ranges. Men and vehicles moved through an area starting at a close range and increasing this range until the operator could no longer see the objects. The purpose of this exercise was to show the operators how various targets would appear at various ranges. Known targets were then sighted in the instrument by the O.I.C. The operators were shown these targets and the O.I.C. identified them for the operators. In this manner the operators would learn to identify targets.

II. (C) CREW DRILLS

This test was conducted for all of the following conditions:

Clear Night.....No Moon

Clear Night.....All phases of the moon.

Overcast Night....No available moonlight or starlight.

Rain.....No available moonlight or starlight.

**CONFIDENTIAL**



ENCIAI-25-0

7 June 1968

SUBJECT: Night Vision Sight

II. (C) The average time necessary for each of the eight operators to set up and orient the instrument during the first test was thirty-five minutes. It was noted at this time that the equipment was too cumbersome for an individual to handle efficiently. The operators were therefore assigned to teams of two men each. The average time necessary for two men to set up and orient the instrument was reduced to an average of fifteen minutes. This time was the same for all of the above light and weather conditions.

### III. (C) CAPABILITIES AND LIMITING FACTORS ON EFFECTIVENESS OF OPERATORS

This test was conducted for all of the following conditions:

Clear Night.....All phases of the moon.

Clear Night.....No Moon.

Overcast Night....No available moonlight or starlight.

Light Rain.....No available moonlight or starlight.

At the beginning of the test, the average period of eye endurance for each of the eight operators was thirty-five minutes. Throughout the testing, the period of eye endurance improved up to a maximum of two hours. The above light conditions do not affect the length of time an operator can observe through the instrument. It was determined that the best schedule for night long operation is a minimum of two operators, observing for one hour each. In this way two operators can observe an entire night without eye fatigue.

### IV. (C) LIGHT EFFECTS ON INSTRUMENT

This test was conducted for all of the following conditions:

Clear Night.....No Moon.

Clear Night.....All phases of the moon.

Overcast Night....No available moonlight or starlight.

Rain.....No available moonlight or starlight.

The available moonlight or starlight has no apparent effect on the range to light which will cause the instrument to blackout. The range from the instrument to these lights depends on the visibility at ground level. This range is reduced under conditions of haze, fog or rain. The range to lights which will cause the instrument to blackout also depends on the line of sight angle. For example, vehicle lights will cause the instrument to blackout from a range of 3500 meters only if the vehicle lights are aimed directly at the objective lens of the instrument. Range can only be determined for a light source which emits light in all directions such as a flare. In all cases the instrument will remain blacked-out only as long as the light source is directed at the objective lens of the instrument. Artillery fire was observed at a range of 1000 meters. The shell explosion did not cause the instrument to black out however the flash was very bright and obscured the visibility. Artillery fire should be adjusted from a range of at least 2000 meters in order that the target will remain visible when the shell explodes.

## CONFIDENTIAL

16

DA FORM 25-6

7 June 1968

SUBJECT: Night Vision Sight

### V. (C) DETECTION BY ENEMY SURVEILLANCE

The instrument was placed on an observation post and was well camouflaged. Attempts were made to locate this position in the following manners:

1. Using binoculars and BC Scopes with the aid of artillery illumination.
  2. Observers using another Night Observation Device with and without the aid of artillery illumination.
- All attempts to locate the camouflaged instrument failed. It was discovered that if 20% or less of the objective lens is covered, the ability of the instrument is not affected in any way. This will prevent the camouflaged instrument from being seen but does not hinder its visual capabilities.

### VI. (C) LIMITS OF ACCURATE VISIBILITY

This test was conducted for all of the following light conditions:

Clear Night.....No Moon.

Clear Night.....All phases of the moon.

Overcast Night....No available moonlight or starlight.

Rain.....No available moonlight or starlight.

Since the instrument intensifies the light reflected off a target, targets which are hidden from available moonlight or starlight by the shadows of hills or trees cannot be seen clearly. In wooded areas the maximum range will be determined by the point where the tree line begins. The surrounding background of a target will also effect maximum ranges. Light ground or sandy areas reflect more light than areas of heavy vegetation, therefore targets can be seen more clearly and at greater ranges if they are surrounded by a light background. The ranges in areas of vegetation will also vary depending on the amount of vegetation and the color. The degree to which a body of water will improve the range of the instrument depends on the angle of the reflected light. The light must reflect off the water toward the target and the target must be on ground higher than the water.

CONFIDENTIAL

EACIAT-25-0

7 June 1968

SUBJECT: Night Vision Sight

## VII. (C) This test was conducted under the following conditions:

Clear Night.....No Moon.

Clear Night.....All phases of the moon.

Overcast Night....No available moonlight or starlight.

The instrument was placed on an observation post and oriented.

Operators then read azimuths from their positions to various targets.

These azimuths were then rechecked with an aiming circle to determine the accuracy. The azimuth could be read accurately to the nearest

five mils from the vernier scale of the instrument and estimated to

an accuracy of three mils. None of the operators could accurately

estimate ranges when looking through the instrument. This is because

the image appears within the instrument with no depth perception.

The only manner in which a range can be determined is by the operator

observing the terrain and then map spotting the location of the target.

When a target is focused clearly in the instrument, there is a limited

distance in front and behind the target which can also be seen but

is not clearly visible. This prevents the operator from scanning a

large area at one time, and increases the possibility of targets not

being seen even though they may be within the range capabilities of

the instrument.

## VIII. (C) DURABILITY OF INSTRUMENT

The only maintenance authorized at operator level for the instrument is cleaning and changing batteries. One instrument failed to operate after approximately ninety hours of operation. The cause of this failure was not known and the instrument was turned into support maintenance.

It was discovered that after the instrument has been in operation a minimum of five minutes, the power switch can be turned off and the instrument will remain operational for twenty additional minutes. This procedure can be used to increase the life expectancy of the batteries.

## IX. (C) SUGGESTED IMPROVEMENTS

It is suggested that the brackets on the side of the yoke which hold the adapter plate legs be removed. It is not necessary that these brackets be on the instruments. In addition to this, the brackets are very brittle and break off easily during handling, leaving sharp edges which are hazardous to the operator. It is difficult to read accurate azimuths from the azimuth vernier scale in its present position. It is suggested that this scale be moved to the side of the yoke to improve the ability of operators to read accurate azimuths. A small lighting device placed directly above the vernier scale would increase the security of taking azimuth readings.

At the present time a small flash light is furnished for this purpose. Equipment improvement recommendations have been submitted on the above suggestions.

CONFIDENTIAL

**CONFIDENTIAL**

EACIAT-25-0

SUBJECT: Night Vision Sight

The following tables are of the average maximum ranges which have been determined through testing.

TABLE 1 (C) CLEAR ACCURATE VISTIBILITY

LIGHT CONDITIONS	SEEN ON FOOT	VEHICLES NO LIGHTS	VEHICLES WITH BLACKOUT LIGHTS	VEHICLES WITH HEADLIGHTS
Clear No Moon	500	1100	4000	5000
Clear 1/4 Moon	600	1200	4000	5000
Clear 1/2 Moon	800	1800	4200	6000
Clear 3/4 Moon	800	1800	4200	6000
Clear Full Moon	1000	2500	4500	6000
Overcast	500	1000	2500	4500
Rain	400	600	2000	3000

TABLE 2 (C) TARGETS VISIBLE BUT NOT DISTINGUISHABLE

LIGHT CONDITIONS	SEEN ON FOOT	VEHICLES NO LIGHTS	VEHICLES WITH BLACKOUT LIGHTS	VEHICLES WITH HEADLIGHTS
Clear No Moon	600	1700	4000	5000
Clear 1/4 Moon	700	1800	4000	5000
Clear 1/2 Moon	1100	2700	4200	6000
Clear 3/4 Moon	1100	2700	4500	6000
Clear Full Moon	1700	3500	4500	6000
Overcast	600	1100	2500	5000
Rain	500	700	2000	3000

**CONFIDENTIAL**

19

**CONFIDENTIAL**

EACIAT-25-0

7 June 1968

SUBJECT: Night Vision Sight

IX. (C) The inability of operators to estimate ranges when observing through the instrument is detrimental to accurate target location. It is suggested that some type of range determination device be incorporated with or attached to the Night Observation Device such as a laser beam.

X. (C) CONCLUSIONS FOR FATAB USE

It is concluded that the instrument would be most useful primarily to augment the Flash Ranging Platoon's capabilities for night observation.

The instrument would not affect the target location capability of the Sound Ranging Platoon, however it would improve the Sound O.P.'s ability to visually gather battlefield information.

Visual capabilities for Radar Ranging are not necessary and would not improve the capability of Radar Ranging.

Due to the varying factors affecting the range capabilities of the instrument such as shadows from hills or trees, ground color and vegetation, conclusions for FATAB use could be more accurately determined if the instrument were employed in the area of the DIZ.

FOR THE COMMANDER:

FREDERICK T. FLUKES  
1LT, Artillery  
Assistant Adjutant

**CONFIDENTIAL**

UNCLASSIFIED

20

Security Classification

## DOCUMENT CONTROL DATA - R &amp; D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)		2a. REPORT SECURITY CLASSIFICATION	
HQ, OACSFOR, DA, Washington, D.C. 20310		Confidential	
		2b. GROUP	
		4	
3. REPORT TITLE			
Operational Report - Lessons Learned, Headquarters, I Corps (Group) Artillery			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)			
Experiences of unit engaged in counterinsurgency operations, 1 Feb - 30 Apr 1968			
5. AUTHOR(S) (First name, middle initial, last name)			
CG, I Corps (Group) Artillery			
3. REPORT DATE		7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
1 July 1968		19	
6a. CONTRACT OR GRANT NO.		6b. ORIGINATOR'S REPORT NUMBER(S)	
b. PROJECT NO.		682122	
c. N/A		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.			
10. DISTRIBUTION STATEMENT			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY	
N/A		OACSFOR, DA, Washington, D.C. 20310	
13. ABSTRACT			

DD FORM 1473

1A

UNCLASSIFIED

21

The following items are recommended for inclusion in the Lessons Learned Index:

ITEM 1

\* SUBJECT TITLE \_\_\_\_\_

\*\* FOR OT RD # \_\_\_\_\_

\*\*\*PAGE # \_\_\_\_\_

ITEM 2

SUBJECT TITLE \_\_\_\_\_

FOR OT RD # \_\_\_\_\_

PAGE # \_\_\_\_\_

ITEM 3

SUBJECT TITLE \_\_\_\_\_

FOR OT RD # \_\_\_\_\_

PAGE # \_\_\_\_\_

ITEM 4

SUBJECT TITLE \_\_\_\_\_

FOR OT RD # \_\_\_\_\_

PAGE # \_\_\_\_\_

ITEM 5

SUBJECT TITLE \_\_\_\_\_

FOR OT RD # \_\_\_\_\_

PAGE # \_\_\_\_\_

\* Subject Title: A short (one sentence or phrase) description of the item of interest.

\*\* FOR OT RD # : Appears in the Reply Reference line of the Letter of Transmittal. This number must be accurately stated.

\*\*\*Page # : That page on which the item of interest is located.

- - FOLD - 22

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

Office of the Assistant Chief of Staff for  
Force Development  
ATTN: Operational Reports Branch  
Headquarters, Department of the Army  
Washington, D.C. 20310

STAPLE

DA Label 18, 1 APR 59 PREVIOUS EDITIONS OF THIS LABEL ARE OBSOLETE.

- - FOLD - - -